

Remarks

Claims 1, 4, 5, 7-10, 13, 14, and 16-33 are pending in this application. Claims 1, 10, 14, 21, 22, 23, 24, 26, 30, and 32 are the independent claims. Applicants respectfully request reconsideration and allowance of the application.

Applicants note with appreciation the allowance of Claim 21 and the indication of allowability of Claims 4, 16, and 26 if rewritten in independent form including all the limitations of the base claim and any intervening claim. Applicants have so amended Claims 4, 16, and 26 and respectfully believe them to be presently in condition for allowance.

In response to the Office Action's objection to Claim 4, Applicants respectfully believe the amendments to Claim 4 render the objection moot and request its withdrawal.

On the merits the Final Office Action dated April 18, 2008 rejects Claims 1, 5, 7-9, 14, 17-20, 27, and 29-33 under 35 U.S.C. § 103(a) as being unpatentable over Koo et al. (US 5,345,231; hereinafter Koo) in view of Poon et al. (US 5,940,438; hereinafter "Poon") and Bashan et al. (US 6,045,043; hereinafter "Bashan"). The Office Action also rejects Claim 22 under 35 U.S.C. § 103(a) as being unpatentable over Koo in view of Poon. The Office Action also rejects Claims 10, 13, 23, and 28 under 35 U.S.C. § 103(a) as being unpatentable over Koo in view of Dent et al. (US 5,230,003; hereinafter "Dent") and Bashan. The Office Action also rejects Claim 24 under 35 U.S.C. § 103(a) as being unpatentable over Koo in view of Dent. The Office Action also rejects Claim 25 under 35 U.S.C. § 103(a) as being unpatentable over Koo in view of Dent as applied to Claim 24 and further in view of Bashan. Applicants respectfully traverse these rejections and believes the amendment renders the § 103(a) rejections moot. Applicant respectfully requests allowance of all claims.

In response to the § 103(a) rejection of Claim 1, Applicants respectfully submit that Koo shows a generic early contactless inductive data transmission system. As stated in the Office Action, Koo does not show first and second stages for decoding two different ways and a decision stage for deciding between the two. Poon describes a modem which decides between two coding schemes for decoding (for video decoding, cell packet data decoding, or any RF transceiver "roaming from one area to another where different

formats are used" see, e.g., Col. 3 lines 24-29). Poon requires that a modem reconfigures the logic of a single software configurable demodulator 84 (Col. 7, lines 2-16):

tering of the incoming signals from the tuner. Note that the tuner is set to a given channel by channel select **73**. The output of front end **72** is coupled to A-D converter **82**, and thence to software-configurable demodulator **84**. Additionally, in one embodiment, the header of the input signal is stripped off and provided to a host processor **74** which determines from flags in the header the modulation format type. Alternatively, the host processor can determine the modulation format through channel input **76** from the channel select **73**. In either event, the output of the host processor specifies the modulation format to a configuration controller **78**, the purpose of which is to select from a configuration RAM **80** the appropriate demodulation mode to be downloaded to demodulator **84**.

The combination of Koo and Poon fails to recite or suggest a first and a second physical decoding stage. Additionally Poon selects the format to which it should reconfigure the logic of the single software configurable logic block depending on the channel to which the receiver is tuned or on detection of format flags (such as contained in a header of an input signal) (see e.g., Col. 6, lines 15-17 and Col. 7, lines 3-12). This fails to recite or suggest a decision stage capable of determining which of the first and second decoding stages decodes the encoded data signal. Bashan fails to recite or suggest that which the combination of Koo and Poon lack. The Office Action argues that Bashan shows in Col. 5, lines 63-67 the use of Miller or Manchester coding. The combination of Koo, Poon, and Bashan additionally fails to recite or suggest every element of Applicants' Claim 1 because since Poon requires using one demodulation mode or another in a single software-reconfigurable demodulator, one of Bashan's Miller or Manchester would have to be selected. Thus the combination of references also fails to recite or suggest a decision stage capable of determining which of the first and second decoding stages

decodes the encoded data signal. Applicants respectfully traverse the rejection of Claim 1 over Koo, Poon, and Bashan for at least these reasons and requests its withdrawal.

In response to the § 103 rejection of Claim 10, Applicants respectfully submit that Dent recites in Col. 6, lines 20-23:

Accordingly, the present invention reduces signal processing time and overhead by eliminating the need for an explicit voice/data switching signal and by terminating the operation of nonselected decoders. Regard-

Dent selects which decoders to use based on which decoder has the lowest metric value over a number of iterations to establish a pattern indicating optimum reliability and efficiency (see e.g., Col. 5, line 57 to Col. 6, line 19). According to dent, multiple decoders parallel process until the decision circuit 34 determines which decoder is performing optimally. Once the decision circuit 34 reaches a decision, as indicated in the paragraph above, it terminates the operation of a nonselected decoder by sending a stop signal (Col. 6, lines 15-19). This fails to recite or suggest both the first decoding stage and the second decoding stage attempt to decode the encoded data signal as stated in Applicants' Claim 10 because according to Dent, only the selected decoder operates to decode to conserve signal processing resources. Thus Applicants respectfully traverse the rejection of Claim 10 over Koo in view of Dent for at least the above reasons and request its withdrawal.

In response to the § 103 rejection of Claim 22, Applicants respectfully submit that the combination of Koo and Poon fails to recite or suggest a first and a second physical decoding stage. Additionally Poon selects the format to which it should reconfigure the logic of the single software configurable logic block depending on the channel to which the receiver is tuned or on detection of format flags (such as contained in a header of an input signal) (see e.g., Col. 6, lines 15-17 and Col. 7, lines 3-12). This fails to recite or suggest a decision stage capable of determining which of the first and second decoding stages **decodes** the encoded data signal. Applicants respectfully traverse the rejection of Claim 22 over Koo in view of Poon for at least the above reasons and request its withdrawal.

In response to the § 103 rejection of Claim 24, Applicants respectfully submit that Dent recites in Col. 6, lines 20-23:

Accordingly, the present invention reduces signal processing time and overhead by eliminating the need for an explicit voice/data switching signal and by terminating the operation of nonselected decoders. Regard-

Dent selects which decoders to use based on which decoder has the lowest metric value over a number of iterations to establish a pattern indicating optimum reliability and efficiency (see e.g., Col. 5, line 57 to Col. 6, line 19). Once Dent reaches a decision, as indicated in the paragraph above, it terminates the operation of a nonselected decoder. This fails to recite or suggest that once the decision stage applies decision information to the data processing device regarding which of the first and second decoding stages decodes the encoded data signal, the selected determined first or second decoding stage is used for processing the remainder of the encoded data signal as stated in Applicants' Claim 24. Dent uses a metric of optimum performance based on metrics, rather than which stage actually decodes. Dent sends a stop signal to all non-selected decoders once decision circuit 34 decides which decoder is performing optimally. Dent does not recite or suggest decision circuit deciding based on whether a particular decoder decodes and selecting the one that does to continue processing the encoded data signal. Dent only recites selecting the best performer and stopping all the other decoders. Thus Applicants respectfully traverse the rejection of Claim 10 over Koo in view of Dent for at least the above reasons and request its withdrawal.

Applicants submit that Claims 14, 21, 23, 26, 30, and 32 recite methods and data carriers substantially corresponding to the above-argued Claims 1, 10, 22, and 24 and Applicants respectfully believe them to be allowable for at least the same reasons as indicated above.

Applicants submit that Claims 5, 7-9, 13, 16-20, 25, 27-29, 31, and 33 depend from one or another of the independent claims discussed above and Applicants believe them to be allowable for at least the same reasons stated above.

In view of the remarks above, Applicants believe that each of the rejections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the undersigned.

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